JOINT REPLACEMENT SURGERY? ASK YOUR ORTHOPEDIST ABOUT ROBOTIC TECHNOLOGY

When asked to list the benefits of robotic joint replacement surgery, Dr. Robert J. Avino responds by listing benefits for both the patients who opt for it and the orthopedic surgeons who perform it.



"The focus with robotic joint replacement surgery is to be extremely accurate and less invasive," says Dr. Avino, a board-certified and fellowship-trained orthopedic surgeon with Palm Beach Orthopaedic Institute. "It is less disruptive to the patient's surrounding soft tissues, and it allows surgeons to recreate the patient's' natural anatomy."

Indeed, robotic joint replacement is a surgical protocol that leverages the immense accuracy and precision of robotic technology, explains Dr. Avino, who has performed over 500 robotic hip and knee replacements using state-of-the-art Mako technology at Jupiter Medical Center.

"When I perform surgery, I control the robotic arm to place the components in the exact right spot," he says.

Compared to traditional surgery, robotic joint replacement surgery enables patients to experience a quicker recovery with less pain. Patients resume simple movements like walking and climbing a few stairs in a matter of hours after surgery. Many hip surgery patients are able to return to normal activities within a few days and weeks.

Dr. Avino describes the surgical technology as a beautiful blend of detailed imaging, minimally invasive surgery, and precise alignment of a new artificial joint with the patient's existing natural bone and joint structure.

- CAT scan of the patient's joint to precisely measure the patient's natural anatomy in order to choose the ideal-sized replacement joint and to position it specifically to match a patient's unique anatomy. The vast majority of replacement joints are made of titanium, ceramic, and a highly durable plastic. Dr. Avino points out that CAT Scans are more accurate than X-rays for placement and "fit" of the new joint.
- A specially trained surgeon's control of a surgical robotic arm to place the components in the exact spot they need to be for maximum joint functionality and natural movement: "With the robot, we can our target every time," says Dr. Avino.

The goal: precision, accuracy, outcomes

Today's surgical protocols and techniques for broader joint replacement grew out of earlier results for knee replacement surgery in the mid-to-late 2000s, he points out.

"Today with better imaging and the precision of robotic technology, we are able to get very accurate placement of the joint components intraoperatively, and I can marry that to each patient's own anatomy," he notes. Knees tend to take longer than hips to heal, he says. "But 3 months after a knee replacement - that's when you'll really wish you'd have made the decision sooner," he says.

What do surgeons focus on most intently?

"For joint replacement, the main thing we care about is improving outcomes and decreasing complications," Dr. Avino says. "You will be out of pain, back doing the activities you enjoy, and experiencing the best possible outcome.

For more information, contact the Orthopedic Patient Navigator at Jupiter Medical Center at 561-263-3633.

The various steps of robotic surgery include: